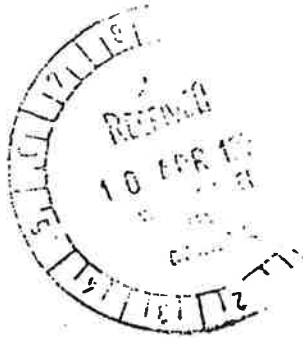


COOK MULDOWNEY COSTELLO

CONSULTING ENGINEERS

M. J. COSTELLO, A.C.E., R.E. ENG.
 M. J. COSTELLO, A.C.E., R.E. ENG.
 T. N. COSTELLO, E.E., M.A.S.T.E., R.E., ENG.



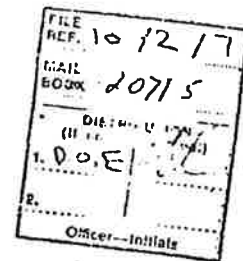
19 Lower Tarewa Road,
 Whangarei
 Tel. 89-529
 Ref. 1205/81
 7 April 1978

The General Manager,
 Whangarei City Council,
 Private Bag,
 WHANGAREI

Attention: Mr J. Kinney

Dear Sir,

re: Lot 19 - Warwick Place
Provan Homes



As discussed, the builders uncovered a layer of topsoil up to 1m deep under shallow clay fill during the preparation of the site for the construction of two town houses.

The subdivisor advises that this has arisen from the covering up of a swamp in the old gulley which appears to have gone diagonally across Lot 19 during clearing for the fencelines prior to the subdivision.

The Subdivisor has excavated the topsoil and fill back to original clay to waste and during the excavation work, inspection showed that the depth of swamp debris decayed to topsoil was greatest in the middle of Lot 19 tapering out in all directions.

The builder is now proceeding with the house construction with his footings on original clay as shown in the building permit application.

Yours faithfully,

T.N. Costello

T.N. Costello
COOK MULDOWNEY COSTELLO

11447
24507

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CONSULTING ENGINEERS

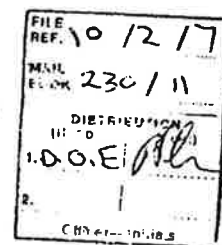
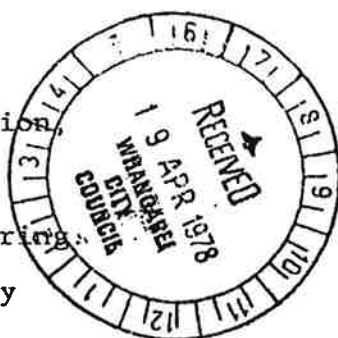
D. M. COOK, M.N.Z.I.E., A.I.G., REG. ENGR.
F. S. MULDOWNNEY, B.E., M.N.Z.I.E., REG. ENGR.
T. N. COSTELLO, B.E., M.N.Z.I.E., REG. ENGR.

19 Lower Tarewa Road,
Whangarei
Tel. 89-529
Ref.

14th April 1978

General Manager,
Whangarei City Corporation,
Private Bag,
WHANGAREI.

For Director of Engineering,
Attention: Mr J. Kinney



Dear Sir,

Re: LOT 19 WARWICK PLACE

Inspection were made on Friday 14th April 1978 of the footings for the town houses on the above site.

Subject to some further excavation and cleaning out on the footings under the dwarf wall in the middle of the building and short post hole bores under the six piles in that area they are considered to be on ground of adequate bearing capacity and the slopes considered to be stable. Instructions were given to have this work carried out to correct the "bad housekeeping" that had occurred and to take the footings through the small amount of topsoil and topsoil contaminated material over the hard original clays.

Yours faithfully,

T.N. Costello

T.N. Costello,
COOK, MULDOWNNEY, COSTELLO.